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THE BALKAN CAMPAIGN

By DOUGLAS WILSON JOHNSON

THE BALKAN BARRIER

Near the head of the Adriatic there rise several small streams whose waters flow almost due eastward through the Save and Danube Rivers, to empty into the Black Sea. South of this west-to-east river trench, and separated by it from the open plains of Hungary and Rumania, lies the rudely triangular mass of complex mountainous country known as the Balkan Peninsula (Fig. 1). Prior to last October the bulk of this difficult terrane stood as an effective barrier between the Central Empires and their Turkish ally. The northwestern corner of the triangle, comprising Bosnia and Herzegovina, was largely under Austrian control, while in the eastern corner the Turks were effectively resisting all attempts of the Allied armies and navies to dislodge them. But the rest of the territory was either openly hostile to the Teutonic powers, or was maintaining a wavering neutrality which constantly embarrassed communication with the Turks and threatened to become an active menace at any moment. It was to resolve this intolerable situation and to impress the world by a decisive military achievement that the German general staff planned the Balkan campaign of 1915.

THE MORAVA-MARITZA TRENCH

Through the mass of the Balkan mountains rivers have cut two great trenches which constitute the only important lines of communication in the region. One of these passageways or "corridors" runs southeastward from Belgrade on the Danube to Constantinople on the Bosphorus and consists in large part of the valleys of the Morava and Maritza Rivers. The other connects Belgrade with the harbor of Saloniki on the Aegean Sea and is formed by the Morava and Vardar valleys. From Belgrade as far as Nish the Morava valley is common to both routes. Although possession of the Morava-Vardar trench incidentally became essential to the Teutonic powers for military and political reasons discussed below, it was primarily for control of the Morava-Maritza depression that the campaign was undertaken.

The full significance of the Morava-Maritza trench can be appreciated only in case we recall the important rôle it has always played in the history of the Nearer East. From all parts of Europe highways of travel converge southeastward toward the points where Occident and Orient touch hands at the Bosphorus. Whether coming from the plains of the Po over the Pear Tree Pass, from western and central Europe along the upper Danube, or from farther north through the Moravian and other gaps to the Vienna

gateway, travelers find the mass of the Balkans blocking the path to Constantinople and the East; just as in other days the hosts which invaded Europe from the lands of Asia Minor found in this same barrier an impediment to progress toward the northwest. Under these conditions it was inevitable that a continuous river trench cutting clear through the barrier from the plains of Hungary to the shores of the Bosphorus should become a topographic feature of commanding historical importance.

Long before the time of the Romans the Morava-Maritza valley had become a highway for peoples migrating east or west through the mountainous Balkan lands. In a later day one of the principal Roman military roads led from Belgrade through the trench to Constantinople. The great Slavonic flood which issued from the plains of northeastern Europe through the Moravian and Vienna gateways entered the Morava valley and, in the seventh century of our era, was flowing through the trench to surge about the walls of Adrianople. A few centuries more, and the mountain sides were echoing the shouts of the Crusaders who toiled along the same pathway to fight for the Holy Sepulcher. Back through the same defile came those hordes of conquering Turks who pushed the limits of their misrule to the very gates of Vienna. In our day a double line of steel rails has succeeded trail and military road, and the smoke of the Orient Express hangs low in the very valley where, centuries ago, dust clouds were raised by the passing of Roman legions, Crusading knights, or Turkish infantry. Here is the vital link in the great Berlin-to-Bagdad railway route, the channel through which German ambition hopes to reach the Far East, and the path by which the Teutonic powers must send men and munitions to the hard-pressed Turks and bring back food to their own hungry people.

Let us examine for a moment the physical characteristics of the stream-carved trench which has figured so prominently in the past history of southeastern Europe and which again today has focused upon it the eyes of the civilized world. The mouth of the Morava valley is widely open to the plains of Hungary, where the Morava River unites with the Danube some miles east of Belgrade. Southward up the river the valley narrows gradually, and the hills on either side rise to mountainous proportions; but as far up as Nish it is mature, with a flat and sometimes marshy flood-plain over which the river flows in a complicated meandering course, with occasional ox-bow lakes and braided channels. Only at two points, where the river has probably cut through ridges of exceptionally resistant rock, does the valley narrow to a more youthful form and force the better roads to make long detours over the hills. There is usually ample room for a main road on each side of the river, while the railway crosses from one bank to the other in order to connect with the larger towns located on the valley floor. The river is navigable half way up to Nish, and throughout the entire distance the flood-plain soils yield rich harvests of maize and wheat.

From Nish the route leads southeastward up a branch stream called the Nishava, to a low divide within Bulgarian territory. The valley of the Nishava is more youthful than that of the Morava and is so narrow in places that the wagon road twice abandons it for a course across the mountains. The railway is able to follow it throughout, however, and in one place the valley widens to a broad basin on the floor of which lies the important town of Pirot. Here fortresses crowned the adjacent hills to guard against a Bulgar invasion of Servia along this comparatively easy path.

After crossing the divide at Dragoman Pass, about 2,500 feet above sea-level, both road and railway descend to the broad, fertile floor of the Sofia basin. Fortunately this trends northwest-southeast and is thus in line with the general course of the Morava-Maritza trench, although it drains to the northeast through a narrow outlet gorge into the Danube. At the southeastern end of the basin the low Vakarel Pass, but little higher than the Dragoman, is crossed, and road and railway easily reach the much larger basin drained by the Maritza River and its tributaries.

The Maritza takes a direct course toward Constantinople for more than one hundred and fifty miles, then turns abruptly southward to the Mediterranean Sea. At this sudden bend in the river stands the fortified city of Adrianople. Except for a short distance below the city, the Maritza no longer serves as part of the great pathway to Constantinople, but becomes a segment in the natural moat, consisting of the Tundja and lower Maritza valleys, which in the past has repeatedly provided Constantinople with an admirable first line of defense against aggression from the west. Above Adrianople the river is too frequently obstructed with sand-bars to be of much use for navigation, but its broad basin carries the road and railway which follow the southern bank of the stream. South of Adrianople the small Ergene River flows to the Maritza from the east, and its valley offers a very gentle grade which the railway ascends till within a few miles of Constantinople.

THE MORAVA-VARDAR TRENCH

Second in importance to the Morava-Maritza corridor is the deep trench which cuts through the Balkans from north to south, connecting Belgrade with Saloniki. The Morava-Vardar depression does not lead to the land bridge uniting Europe with Asia Minor, but it does serve as a most important outlet channel from the plains of Hungary to the Mediterranean Sea, and is one of the shortest routes from Central Europe to the Suez Canal. From southern Germany and the eastern Alps, the foothills of the Carpathians and the Alps of Transylvania, and from all of the great Hungarian basin, the valley routes lead straight to Belgrade, whence the Morava-Vardar valley cleaves a way through the mountains to the open waters beyond.

It is not without reason that the Morava-Vardar trench has been called the key to the history of the Balkan Peninsula. Through it ebbed and flowed the tides of repeated invasions from the dawn of history. Under Roman dominion most of it was occupied by an important military road. Through it the Ostrogoths entered northern Greece in the fifth century, A. D., while names still found on the map of Greece bear witness to the great Slav flood which, two centuries later, flowed through the trench and overwhelmed the Greek peninsula. The story of the Serb race is largely the story of a struggle for control of this vital artery of communication. Austria's ambition to seize for her own uses a channel to the sea which should not open on the enclosed Adriatic has been the mainspring of her reactionary policy in Balkan affairs. Bulgaria, realizing that the nation which dominates the Morava-Vardar depression must ultimately dominate the politics of the peninsula, precipitated the second Balkan war in order to make good by force of arms her claim to a section of the trench; and the same incentive played an important part in determining Bulgaria's alliance with the Teutonic powers in the present conflict. Most of the friction between Greece and the Entente Allies had its inception in the fact that Greece controlled one section of a channel all of which was essential to the existence of Serbia. The Belgrade-Saloniki railway was the main artery of commerce which carried through the trench the life-blood of a nation.

The physical characteristics of the Morava valley as far south as Nish have already been discussed in connection with the Morava-Maritza trench. From Nish southward to Leskovatz road and railway traverse one of the open intermontane basins which frequently occur in the midst of the Balkan ridges; but farther south the stream flows from a youthful gorge which continues up the river for ten or twenty miles before the valley again broadens out to a somewhat more mature form. Just north of Kumanovo lies the divide between the Morava and Vardar drainage, a low, inconspicuous water-parting some 1,500 feet above sea-level, located in the bottom of the continuous, through-going trench, and placing no serious difficulties in the way of railroad construction.

South of Kumanovo the valley broadens into a triangular lowland, near the three corners of which stand Kumanovo, Üsküb, and Veles. The main Vardar River enters the lowland from the west, flowing out again at the south through a narrow, winding valley which carries the railway, but no good wagon road. At Demir Kapu the valley narrows to an almost impassable gorge for a distance of several miles but soon broadens again to a flat-floored valley in which the river follows a braided and occasionally meandering channel to the sea. The lower course of the Vardar lies in a very broad, marshy plain terminating in the delta southwest of Saloniki. The special strategic importance of the triangular lowland near Üsküb and the Demir Kapu gorge will be emphasized later.

While the Morava River is navigable for small boats from the mouth half-way up to Nish, the upper Vardar is too full of rapids and its lower course too full of sand-bars to make river traffic practicable. The strategic value of the Morava-Vardar trench, like that of the Morava-Maritza, lies in the fact that, notwithstanding it occasionally narrows to gorgelike proportions, it gives an unbroken channel-way clear through a rugged mountain barrier.

PEACEABLE CONQUEST OF THE MARITZA VALLEY

The immediate object of the Balkan campaign of 1915 was to secure for Germany complete control of the Morava-Maritza trench and the Orient Railway which runs through it from Belgrade to Constantinople. Roughly speaking, one-third of the trench was in Turkish territory, and therefore already subject to German supervision; one-third was in Bulgaria; and the remaining third in Serbia. German diplomacy set itself the task of inducing Bulgaria to become an ally of the Central Powers, in order that the middle third of the Morava-Maritza trench might pass under German control without a contest and in order, further, that Bulgarian troops might bear the brunt of the fighting necessary to capture the remaining third from Serbian hands.

This was truly an ambitious plan, but certain considerations having a geographic basis made it possible for Germany to crown the program with success, and that with slight cost and incalculable profit to herself. The close of the second Balkan War found Bulgaria not only bitter from the disastrous defeat with which her treachery to her allies had been punished, but suffering serious geographical disadvantages from the illogical boundaries forced upon her. Rumania's appropriation of the Dobrudja brought hostile territory close to Bulgaria's chief seaport of Varna and also menaced the safety of the railway connecting with the port, since this line lies parallel to the new boundary and close to the frontier. The natural outlet for all central Bulgaria is to the Mediterranean by way of the lower Maritza River; but the reconquest of Adrianople by the Turks led to a division of territory which forced Bulgarian goods en route downstream to the Bulgarian port of Dedeagatch to cross through a small section of Turkey. The only other natural channel to the Mediterranean from Bulgarian lands was down the Struma valley to the port of Kavala; but Greece in her turn had insisted on a boundary which should leave the lower course of the river and the port in her hands, thus compelling Bulgarian commerce by this route to pass through Greek territory. Finally, Serbia obtained possession of that section of the Morava-Vardar trench which Bulgaria had coveted, leaving to the latter no part of the key to future power in the Balkans. The opening of the present war thus found Bulgaria with a serious geographical grievance against every one of her neighbors. With coast-lines bordering on two seas, every bit of her com-

merce, save only that with Russia, was forced to pass through hostile lands.

Here was a fertile field for German diplomatic effort, and Bulgaria lent a willing ear to plans which promised immediate redress of past wrongs. Turkey was induced to return to Bulgaria the strip of land west of the lower Maritza, thereby insuring to her a railway connection to her Mediterranean port lying wholly within her own boundaries. As a further reward for direct action against Serbia, Bulgaria should receive the coveted section of the Morava-Vardar trench, the conquest of which would be rendered easy by Teutonic co-operation from the north. It was a bargain in valleys. In return for free use of the upper Maritza valley, and assistance in effecting the conquest of the Morava valley, Bulgaria was to receive a part of the lower Maritza valley and a section of the Vardar valley. German diplomacy won, the geographic bargain was made, and from that moment there remained only the problem of forcibly seizing the Morava-Vardar trench.

NATURAL DEFENSES OF THE MORAVA-VARDAR TRENCH

While conquest of the Morava valley and its continuation up the tributary Nishava was alone necessary to complete Teutonic possession of the Belgrade-Constantinople railway route, two considerations made a comprehensive campaign against the entire Morava-Vardar trench essential. In the first place, as we have just seen, the Vardar valley had to be secured for political reasons, since its possession by Bulgaria constituted an essential part of the Teuton-Bulgar bargain. But military reasons also required its capture. It constituted the one effective line of communication leading to the Serbian armies defending the northern frontier. To cut it was to deprive those armies of reinforcements, munitions, and other supplies coming from the south. Furthermore, possession of the Morava-Maritza trench would never be secure so long as Serbia and her allies held the Vardar depression, for at any moment they might launch a bolt along this natural groove which would sever the Orient Railway at Nish and thus undo all that had been accomplished through the new alliance with Bulgaria. For the Teuton-Bulgar forces the capture of the combined Morava and Vardar valleys was a single military problem. Let us examine the physiographic features which serve as natural defenses of this important trench.

The Northern Defenses. The Morava valley is widely open to the north and is there bounded on both sides by comparatively low hills. An enemy securing a foothold in the rolling country to the east or west could enter from either of these directions as well as from the north, just as the Orient Railway coming from Belgrade enters the valley from the west, twenty-five miles above its mouth. Hence an effective barrier against attack from the north must cover more than the actual breadth of the northern entrance to the valley. Such a barrier is provided by the natural moat of the Save

and Danube Rivers which protects the entire northern frontier of Serbia; and by the hills south of the moat which, as one progresses southward, rise into a wild, mountainous highland.

The Save is a late-mature river swinging in great meanders across a broad, marshy flood-plain. The extensive swamp-lands on either side of the river are difficult to traverse at any time, while the flood waters which spread over the lowland in spring and autumn often make the barrier quite impassable except at Mitrovitza (not to be confused with the Mitrovitza near the Kosovo Polye referred to farther on). South of Mitrovitza and west of Shabatz the marshy peninsula between the Drina and the Save is called the Matchva and is famous for its inhospitable character. In volume the Save is of sufficient size to constitute an obstacle against invasion, but for purposes of navigation it suffers from its overlong meandering course and from frequent shifting of channels and sand-bars. At no point is the stream fordable, and at Belgrade alone is it crossed by a bridge.

The Danube is a river of imposing volume, in places from one to several miles wide. Its value as a defense against invasion is very great, notwithstanding that the numerous islands which mark its braided course from Belgrade east to the Iron Gate gorge offer some advantages for a crossing. It is unfordable and unbridged. East of the braided section the river exchanges its open valley for a narrow, winding gorge which cuts through a mountainous upland and reaches its most imposing aspect at the Iron Gate near Orsova. The walls of the gorge, sometimes forest-clad, sometimes bare rock, are exceedingly steep; while the mighty volume of water constricted within its narrower channel gives a river which is both swift and deep. To cross such a barrier in the face of enemy fire would severely test the abilities of the best-trained soldiery.

It is not strange that so impressive a natural obstacle as the Save-Danube valley should have served for centuries as a bulwark against invasion of the Balkan Peninsula from the north, nor that it should long have been the physical barrier separating the dominions of the Sultan from Austrian lands. In combination with the difficult hill country to the south, the great natural moat furnished the Serbians with an admirable defensive screen, in attempting to pierce which the Teutonic armies suffered more than one costly defeat.

The Eastern Defenses. Throughout its entire length the Morava-Vardar trench is protected on the east by a complex of mountain ridges representing the western ends of the Balkan and Rhodope masses and the south-western extremity of the Transylvanian Alps. All of these ranges appear to have reached a mature stage of dissection in which the maximum degree of ruggedness is attained. A maze of steep-sided ridges and peaks rise from one to several thousand feet above the bottoms of narrow valleys, while at the north the mountain barrier is reinforced by the gorge of the lower Timok River and a short section of the Danube valley. Much of

this difficult country is forested, and no part of it could be crossed with ease by a hostile army.

There are, nevertheless, certain pathways through the eastern barrier which might be forced by a foe possessing superior numbers. Chief among these is that segment of the great Morava-Maritza trench carved by the Nishava River, which unfortunately rises within Bulgarian territory, and flows directly through the barrier into the Morava-Vardar trench at the critically important junction near Nish. To stop this gap the fortifications of Pirot just inside the Serbian border were constructed. Zaietchar, another fortified town farther north, guards the common entrance to the Tsrna and upper Timok valleys, through which hostile forces might ascend to passes whence the drop into the Morava valley is readily effected. The Vlasina, Kriva, and Bregalnitz Rivers, rising at or near the Serbo-Bulgarian boundary on the crest of the main range and flowing westward to the Morava and the Vardar, give access to the trench at Leskovatz basin, at Kumanovo, and in the Veles-Krivolak region. Finally, the broadly open Strumitza valley, mainly in Bulgarian territory, but heading close to the lower Vardar, affords access to several passes from which it is but a few hours' march to the Vardar trench either above or below the Demir Kapu gorge.

It appears, therefore, that despite the protection afforded by difficult mountainous country east of the Morava-Vardar line, the trench was open to attack at a number of critical points, provided the invading forces were sufficiently large to overwhelm resistance and drive their columns through the narrow valleys. This danger was the more acute because along much of the eastern frontier Bulgarian territory reaches the crest of the mountain barrier and in some places even beyond the crest to the western or Serbian slope. It should be noted, furthermore, that the hostile territory flanks the Morava-Vardar trench throughout practically its entire length, usually lying not more than fifty miles distant, while near Vranje and just north of the Greek border westward protrusions of the Bulgarian frontier reduce the distance to a dozen miles or less. The largest and most vital artery carrying the life-blood of Serbia lay dangerously near the surface, and a single stab of the Bulgarian knife might prove fatal.

The Western Defenses. West of the Morava-Vardar trench the threat of danger was less imminent, and the natural protective screen more effective. Although Bosnia and Herzegovina were in Austrian hands, the people were more or less hostile to their new rulers and favorably disposed toward the Serbs. Montenegro was Serbia's ally, while uncertain Albania was not an important factor in any event. Across the Adriatic lay Italy, another ally of Serbia. Only at the north, then, was there danger of an attack upon the Morava-Vardar line from the west; while farther south succor from friends, rather than attacks from enemies, was to be expected from the direction of the Adriatic.

The broad belt of mountains lying between the Morava-Vardar depression and the Adriatic shore is one of the most imposing topographic barriers in Europe. From the earliest times it has stood as an almost impassable wall cutting off the people of central Serbia from all effective intercourse with the inhabitants of the Italian peninsula. In the Middle Ages, Ragusa and other Slavonic cities on the Adriatic coast, although part of a Serbian province and the home of a flourishing school of Serbian literature, found communication with the interior so difficult and with Italy so easy that they came under Venetian instead of Serbian control. The same mountain wall which so long prevented extension of Serbian power westward to the sea, likewise served for centuries as an effective barrier against the eastward migration of Western European civilization into the dominion of the Turks. To the present day no railroad has crossed the barrier to unite the great valley of central Serbia with the sea.

Included in the mountainous belt are ranges high enough to carry snow caps until the month of August, and the name "Albania" is believed by some to have its origin in the snowy appearance of that wild region. It is said that the "Accursed mountains" of northern Albania and eastern Montenegro include some of the least explored lands of all Europe. Just as the mountains of Wales and the Highlands of Scotland preserve languages and customs which have been driven from the open country of England, so the fastnesses of the Albanian hills have kept alive a difficult language that is older than classical Greek and customs which render the rude inhabitants of the country a picturesque subject for study. The conquering arm of the Turk reduced the Bulgarian inhabitants of open plains to complete subjection within a comparatively short time; but a century and a quarter was required to secure a less firm hold upon the mountainous lands of Serbia, while the inaccessible wilds of Albania and Montenegro were never completely subjected to Turkish power. Montenegro was the last Serbian stronghold to yield to Turkish supremacy and the first to regain complete independence.

The physical characteristics of a belt of country so difficult to traverse deserve a word of further description. In the north the mountains consist of submaturely to maturely dissected folds of the Appalachian type, trending northwest-southeast parallel to the northern Adriatic coast and rising from 5,000 to 8,000 feet above sea-level in the higher ranges. Between the hard rock ridges streams have excavated parallel valleys on the weaker beds, but these subsequent valleys are of little real service to man since they lie at right angles to the natural course of his movements between coast and interior. Farther south the rock structure is more complex, and the mountain ridges produced by erosion accordingly of more complicated pattern. Among the rocks involved in the mountain building, limestone is a conspicuous element, and its soluble nature has imposed a peculiarly forbidding aspect on the topography. Most of the rainfall passes under-

ground through sink-holes and smaller solution cavities and then finds its way through subterranean channels to a few principal rivers, lakes, or the sea. As a consequence much of the mountain country is dry and barren, springs are far apart, and the open water courses difficult of access because deeply entrenched in rock-walled gorges. The "gaunt, naked rocks of the cruel karst country" are not only themselves of little value to mankind but they render inaccessible and therefore comparatively useless many excellent harbors on the east coast of the Adriatic.

Because the limestones are purer and more abundant along the coastal border we find that the karst topography is there best developed. Farther inland the maze of hills is occasionally broken by an intermontane basin, the center of whose broad floor may be covered by marsh land, while throughout its remaining portion the fertile soils derived from impure limestone and other rocks yield good returns to the cultivator. Among the largest of the basins are those in which Monastir and Ipek are located, the Tetovo basin, west of Üsküb, where an important branch of the Vardar River takes its rise, and the famous Kosovo Polye, or Plain of the Black-birds, southeast of Mitrovitza, where in its last great effort against the advancing Turk the Serbian army suffered defeat in 1389. It is largely to these areas that one must credit such measure of prosperity as is vouchsafed the dwellers of this western mountain barrier; but absence of connecting lowlands makes the basins of small service in expediting travel across the region.

It is true that certain rivers cut through the mountain ranges to reach the sea; but not one of these has carved a valley suitable to serve as a highway between the coast and the central Morava-Vardar trench. For the most part the cross valleys are narrow and deep and bounded by the steep, rocky walls characteristic of young gorges cut in limestone. Falls and rapids are frequent, and the headwaters usually end in a maze of ridges some distance west of the central depression. The valley of the Narenta carries a narrow-gage railway through the mountains of Bosnia and Herzegovina to a pass, across which Sarajevo and the valley of the Save are accessible; but the only branch line running east to the Serbian border terminates in the vicinity of Vishegrad, while the nearest railway terminus of the Serbian system is more than twenty miles across the mountains at Uzhitze at the head of the Western Morava valley. Through the gorge of the middle Narenta the course of the railway is difficult, and the crossing of the pass is made possible only by using a rack-and-pinion arrangement, which indicates the unsatisfactory character of the route for commercial purposes. The next river of importance to the south is the Drin, which reaches the sea near Scutari; but it flows in a gorge so wild and deep that the poor trails of the district often leave it for a course across the barren hills. When a column of Serbian troops successfully negotiated this defile during the first Balkan war, the feat was hailed as a great military accom-

plishment. The Shkumbi valley offers an entrance from Durazzo to the rail-end at Monastir, but traffic by this route must cross three mountain passes. A famous Roman road, the Via Egnatia, followed this valley; and the only other two important roads to cross the barrier in Roman times had their locations determined by the Narenta and the Drin, although in each case the stream gorge was abandoned in places for a more feasible course over the uplands. Of these former roads little remains today except rugged mule paths. From the standpoint of military geography the broad mountain belt west of the Morava-Vardar trench is practically impassable.

There are within this western mountain belt three depressions which have relatively little value as parts of cross-routes to the sea, but which we must keep in mind if we are fully to understand certain aspects of the campaign against Serbia. First among these is the open Kolubara valley, at the head of which stands the town of Valjevo. A small railway of some military value traverses the valley and connects the town with the Save River. Directly south across the Malyen Ridge, the Western Morava valley heads near Uzhitze and runs east to join the main trench. The Western Morava River is a mature stream meandering on a flat flood-plain of considerable breadth and is bordered by a narrow-gage railway connecting Uzhitze with the Orient Express line. Finally, the Kosovo Polye, already mentioned, forms part of a subsidiary trench parallel to the main Morava depression. Northwestward the basin is replaced by the long, narrow, winding gorge of the Ibar River, which unites with the Western Morava, but which is not followed throughout its length by so much as a good wagon road. To the southeast the basin is drained by the Lepenatz River, which flows through a narrow outlet gorge at Katchanik, the so-called Katchanik Pass, to unite with the Vardar at Üsküb. An important railway leaves the Nish-Saloniki line at Üsküb and runs through the Katchanik gorge and Kosovo Polye to Mitrovitza on the Ibar.

Our examination of the surface features of the region under discussion has developed the fact that the Morava-Vardar trench is well protected against invasion, whether from the north, the east, or the west; but it appears that the most effective protective barrier is on the west, where it is least required and where, indeed, it might shut off much-needed succor from Italy in a time of peril. Let us now trace the history of the campaign against Serbia in the light of our knowledge of the topography.

THE CAMPAIGN FOR POSSESSION OF THE MORAVA-VARDAR TRENCH

Austria's first attacks against the northern barrier formed by the Save-Danube moat and the rising hills to the south were ostensibly made primarily for the purpose of punishing Serbia, while the idea of securing any considerable portion of the Morava-Vardar trench was apparently secondary. The first blow in the world war was struck in the last days of July, 1914, when Austria launched a strong offensive along the entire Save-

Danube line. The Serbians destroyed the great bridge over the Save at Belgrade in order to make the barrier more secure and assailed with vigor every enemy column which endeavored to cross the river by boats or pontoon bridges. For nearly two weeks the Austrians made repeated attempts at seven different points to reach the south bank and at the same time attacked the line of the Drina near Losnitza and Vishegrad. At Belgrade a crossing in the shelter of the ruined bridge was only temporarily successful. Farther east, at Semendria, an island served as the base for crossing on a pontoon bridge where the channel narrowed to 200 yards; but the invaders were first held in check, then thrown back in defeat. All attempts to cross at Obrenovatz, southwest of Belgrade, failed. Far to the west Austrian troops succeeded in forcing a passage at Mitrovitzka and for some days held their ground in the marshes on the south side of the stream; while the Drina was crossed at Vishegrad. Even here the success seems to have been partial and temporary, for Vishegrad was retaken by the Serbs August 7th, and on the 10th the Serbian government reported the expulsion of the last Austrian from Serb territory. The first attempt to force the northern barrier had ended in failure.

A second attempt was made immediately. After a furious bombardment of the Save-Danube line superior Austrian forces crossed the Save at Shabatz and the Drina at Losnitza, while columns attempting to cross at Belgrade were defeated. In the gorge of the Iron Gate at Orsova, where the swift current and steep walls made the attempt peculiarly hazardous, it is said that three Austrian regiments were destroyed while trying to cross by a pontoon bridge. Renewed attempts to cross at Belgrade and Semendria were frustrated. Belgrade stands on the point of a peninsula projecting into Hungarian territory and is subject to attack from three sides. It was the capital of Serbia, and its capture was urgently desired for political as well as strategic reasons. That this important outpost at the very door of the enemy's country, attacked by superior numbers and bombarded by superior artillery, should have resisted capture for four months, is a striking proof of the strategic importance of such barriers as the Save and Danube Rivers. Meanwhile, on August 20th the Austrian armies which had entered northwestern Serbia were overwhelmed with defeat after a four days' battle in the foothills east of Losnitza and in the marshes of the Matchva near Shabatz and were driven back across the Drina with heavy losses. Fleeing remnants of the invading force overcrowded the few bridges spanning the unfordable stream and large numbers perished by drowning. A second attack against the natural defenses of northern Serbia had proven futile.

About the end of the first week in November, 1914, Austro-Hungarian forces more than 300,000 strong launched a third attempt to force the northern barrier. The open valley of the lower Drina and the marshy Save River were crossed by superior forces with the aid of heavy artillery.



FIG. 2.



FIG. 3.

FIG. 2—A portion of the Austrian army halted on the northern side of the Save River barrier. Temporary military bridges are seen in the distance. (Photo copyright by Underwood & Underwood.)

FIG. 3—German troops moving southward through the narrow gorge of the Ibar River. (Photo copyright by Paul Thompson.)

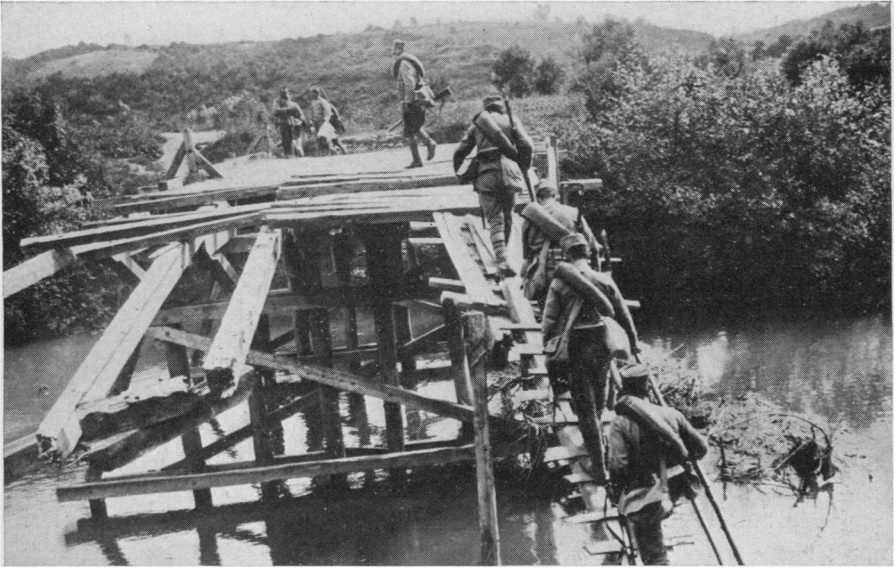


FIG. 4.



FIG. 5.

FIG. 4—Serbian troops crossing the Kolubara River barrier. The bridge was repeatedly destroyed and repaired during the fighting along this stream. (Photo copyright by *L'Illustration* from Underwood & Underwood.)

FIG. 5—A Serbian convoy retreating through one of the two narrows of the Morava valley north of Nish. (Photo copyright by *L'Illustration* from Underwood & Underwood.)

Advancing up the Kolubara valley and the low foothills on either side as far as Valyevo the Austrian center prepared to attack the Serbian position on Malyen Ridge, while the left wing occupied Belgrade, and the right wing captured Uzhitze. Apparently the plan of campaign was for the Austrian center and right wing to converge upon the head of the Western Morava valley and then follow down that depression into the main Morava-Vardar trench, thus outflanking the forces defending its northern end. Meanwhile the small Serbian army was giving a good account of itself, defending river and marsh and hill slope with such effect that not until the first of December did the Austrian forces reach the Uzhitze-Valyevo-Belgrade line. A month of desperate fighting with heavy losses had elapsed before the invaders were ready to attack the main Serbian defensive position on Malyen Ridge just south of Valyevo.

Then came the stroke which startled the world. Assuming the offensive and sweeping down the slopes of the Malyen, the Serbian veterans overwhelmed the whole Austrian army with disaster. Valyevo was recaptured, Belgrade and Uzhitze cleared of the enemy, and all northwestern Serbia swept clean, except the marshy peninsula between Shabatz and the Drina, where Austrian troops maintained a foothold with the aid of topography especially favorable for defense. The upper Drina was crossed by the victorious Serbs, and Sarajevo seriously threatened. A badly beaten Austrian army retired to Austrian soil, to have its commander officially disgraced for the crime of failure. Whether because of difficulty in bringing adequate supplies across the marshy Save and over the foothills to the Austrian front, or because the Austrian forces had been unduly weakened in their month's campaign against the Serb defenses, or because the difficulties of the Malyen position were underestimated and troops were detached to serve elsewhere, a third attempt to force the natural protective barriers of northern Serbia had ended in a costly defeat for the Teutons.

It was now evident that Austria, with many of her troops engaged on other fronts, could not assemble forces competent to dislodge the Serbians from their favorable defensive position. At the same time the need of controlling the Morava-Vardar trench was increasing. The Central Powers were besieged by the Allies, and an outlet to neutral lands and to the sea was a pressing necessity. The Turks needed munitions and the Central Powers needed food. A successful campaign was also required to wipe out the disgrace of past defeats at Serbian hands and to impress wavering neutrals with Teutonic military prowess. Hence was initiated the diplomatic campaign already described, which culminated in the peaceable conquest of the Maritza valley and the accession of Bulgarian troops to the ranks of the Central Powers. Conditions were now ripe for a combined Teuton-Bulgar campaign designed to conquer the entire Morava-Vardar trench.

Early October, 1915, found some 200,000 Germans and Austrians massed

on the Save-Danube line, while a larger number of Bulgars were concentrating in the mountains along the eastern border. The main Serbian army stood behind the northern defensive line to meet the Austro-German attack, smaller forces alone being detailed for operations on the east. A Bulgarian offensive was to be met by the Greek army acting in concert with an Anglo-French expeditionary force. At the last moment the whole scheme of Serbian defense was shattered by King Constantine, who repudiated Greece's treaty with Serbia and refused the promised support of his army. The entire length of the Morava-Vardar trench was thus thrown open to flank attacks from the east while the main Serb armies were trying to protect the northern entrance.

On October 6th the Austro-German assault was launched. Heavy artillery fire which the Serbians could not match protected the columns attempting to force a passage across the river barrier. Nevertheless, the crossing was a costly undertaking; many of the invaders were driven back to the north bank or caught on the south side and annihilated, before large forces after two or three days' hard fighting securely established themselves on the southern bank. It is interesting to note that the principal crossings were effected above Belgrade, below Belgrade, at Semendria, Ram, and Gradishte,—all five of them points close to the northern entrance of the Morava valley, all of them except the last located at the ends of Hungarian railways capable of bringing supplies directly to the points of crossing, and all of them near sand-bar islands in the river which were utilized to good advantage in several and possibly in all cases. There also was heavy cannonading at Orsova, the only other rail-head on the Danube frontier; but no crossing of the difficult gorge near the Iron Gate seems to have been made until later, possibly after threat of envelopment caused withdrawal of the main body of defenders from the northeast corner of Serbia. When the crossing was effected it was with the aid of an island in the river below the town.

After the Danube barrier had been forced, the southward progress of the Teutonic armies was remarkably slow. For six weeks the average rate of advance was about one mile a day. Despite their enormous superiority in big guns, it cost the Austro-Germans much time and the loss of many men to drive the Serbs from successive defensive positions in the hills. More than two weeks elapsed before the Danube was freed from the Serbian menace and so rendered available for boat transport of munitions to Bulgaria and Turkey. Austrian forces crossing the Drina near Vishegrad, the only rail-end on the northwestern frontier, found themselves unable to dislodge the Serbs from their mountain fastnesses, and after ten days' fighting had made no progress toward the head of the Western Morava valley.

Meanwhile Bulgarian armies poured through gaps in the eastern mountain barrier and descended tributary valleys to the Morava-Vardar trench. One

column descended the Vlasina valley to the Leskovatz basin, another reached Kumanovo and Üsküb by the Kriva depression, while a third descended the Bregalnitz to Veles. Vranje, Kumanovo, Üsküb, and Veles, defended by inadequate Serbian forces, were captured within less than two weeks, and the vital artery of Serbia cut in four places. Few could doubt but that these wounds would prove fatal.

Farther north one Bulgarian army was attacking the fortifications of Pirot in order to open a way down the Nishava valley to Nish, while other forces had captured Zaietchar and were trying to push up the Tsrna and the upper Timok to reach the Morava trench above and below Nish. Progress in this field was much slower than farther south, however, and the Serbs maintained themselves in the mountainous northeast corner of their country until the fall of Pirot and Nish developed the danger that Bulgarians pushing north down the Morava and Austro-Germans advancing up the valley to meet them might close the neck of the salient northeast of the trench and capture the forces fighting there. Under pressure of this threat the Serbs withdrew to the southwest; and about November 13, or more than a month after the campaign opened, the entire Morava-Maritza trench was in the hands of the Central Powers, and the reconstruction of the Orient Railway could be prosecuted. The Morava-Vardar trench as far south as Veles was also in their control, and there remained only the problem of rendering the tenure of both trenches secure by pushing the Serbian and Franco-British forces west to the Adriatic and south to the Aegean.

The disastrous results of the Bulgarian occupation of the Morava-Vardar trench now began to be more manifest. Munitions and other supplies for the Serbian armies in the north were becoming exhausted, and the one artery along which they could flow freely had been severed. The quantities which could reach the Serbian front over rough mountain trails were utterly inadequate. Reinforcements were sadly needed; but the one railway leading north from the Anglo-French base at Saloniki followed the Morava-Vardar trench, and so was in the hands of the enemy, while the rough mule paths over the western mountain barrier could bring neither troops nor supplies from Italy. Had the broad belt of mountain and karst intervened between the Morava-Vardar trench and the Bulgarian frontier, and had the more open valleys of the east but led westward to the Adriatic, the history of the Balkan campaign would have been very different.

It was supposed that when the Austro-German forces reached the higher mountainous region bordering the Western Morava valley and it became difficult if not impossible to bring up their heavy guns, the rate of advance would become even slower than before. The fact that the advance was actually accelerated has been interpreted to mean that the failure of Serbian supplies weakened the defense more than the unfavorable local topography injured the plans of the offensive. The Teutons moved rapidly across

the Western Morava, and the Serbian army took up a position running eastward along the mountain crests south of the valley, then southward along the ridge west of the Morava-Vardar trench, and southwestward across the Katchanik gorge. It will immediately appear that the Katchanik position was the strategic key to this entire battle front. In the rear of the Serbian armies facing north and east, runs the straight subsidiary trench formed by the Lepenatz valley, Kosovo Polyé, and the Ibar valley. The gateway to this trench is the narrow Katchanik gorge. A railway from Ŭsküb runs through the gorge to Mitrovitza at the north end of the Kosovo Polyé, thereby more than doubling the strategic value of the depression. If the Bulgarian forces already in possession of Ŭsküb should succeed in breaking through the Katchanik gorge into the plain of Kosovo, they could strike north and east against the rear of the Serbian armies and convert retreat into disaster. Little wonder, then, that the "Katchanik Pass" figured so prominently in the war despatches during this period!

But if Katchanik was the key to the Serbian position, Veles was the key to Katchanik. Should the Anglo-French troops coming up the Vardar from Saloniki capture Veles and debouch into the triangular lowland to the north, they would take in the rear the Bulgarian army trying to break through the Katchanik position. It would not be necessary for the Anglo-French force to enter the Lepenatz valley; the mere threat of enclosing the Bulgarians in the valley between the Serbs up at Katchanik and their allies down at the valley mouth would be sufficient to bring the Bulgars out of the trap in order to fight on the lowland, where, if defeated, they could retire northeastward into a region fully under their control. The threat would become imminent the moment Veles fell to the Allies. Such were the topographic relations responsible for the rather striking fact that an Anglo-French attack upon Veles relieved the pressure upon Serbian forces in the mountains far to the north.

The strategic value of Veles was fully appreciated by the Bulgarian commanders, and heavy reinforcements were evidently poured into the Vardar trench at that point. All efforts of the Allied armies failed to achieve their purpose; Veles remained in Bulgarian hands and Bulgarian attacks on the poorly equipped Serbs defending Katchanik gorge proceeded without serious interruption. When it became apparent that the Katchanik position could not long be held, the Serbian armies at the north and east fell back toward the Ipek basin, while those farther south retired on the Monastir basin. All danger to the Teutonic occupation of the Morava-Vardar trench north of Veles was thus removed, and the remainder of the campaign consisted in squeezing the remnants of the shattered Serb forces and their Montenegrin allies westward through Albania and southward through Montenegro to the sea; and in driving the Anglo-French army and the Serbs near Monastir back upon the Saloniki defenses. The first of these movements progressed with exceeding slowness because of the

difficult character of the country; and the terrors of the Serbian retreat over rugged mule paths and through wild mountain gorges in the cold and snow of winter can scarcely be imagined. But from the standpoint of strategic geography the second movement alone merits special consideration.

When the French and English pushed up the Vardar valley toward Veles they seized as their base for a great armed camp the triangle of mountainous ground lying between the Vardar River and one of its tributaries known as the Tsrna, the latter a stream which must not be confused with the river of same name emptying into the Trinok in northeastern Serbia. The position had certain topographic advantages which enabled it to be held for a long time in the face of superior forces; but suffered from one serious disadvantage which ultimately compelled its evacuation. Both the mountain ridges and the river trenches afforded admirable natural defenses. The gorge of the Tsrna is steep-sided and the stream unfordable. The only practicable bridge, a few miles above the river's mouth, was destroyed by the French after they had failed in an effort to move westward and join the Serbs, who were fighting at Babuna Pass to prevent the Bulgars from getting into Monastir basin. For defensive purposes the larger Vardar River, protecting the east side of the triangle, was strategically important, because it is both wide and unfordable and its valley is steep-sided,—in one place a veritable gorge.

But it is in the Vardar valley that the chief disadvantages of the situation become apparent. All munitions and other supplies, as well as all reinforcements for the armed camp, had to come from Saloniki over the single-track railway running up the Vardar trench. The railway lies close to the river all the way and for several miles is actually on its eastern bank, or outside the triangle. Its position was thus dangerously vulnerable, and its vulnerability was peculiarly aggravated by the fact that in the Demir Kapu gorge, the Iron Gate of the Vardar, the line is squeezed in between the base of high cliffs and the swiftly flowing river, crosses the river on a bridge at one point, and passes through a tunnel at another. If the Bulgarians, attacking the sides of the triangle, should destroy bridge, tunnel, or narrow road-bed in the gorge, the forces within the triangle would be caught in a trap. Hence it was that when the dispersal of the Serb armies to the northwest had so far progressed as to free additional Austro-German and Bulgarian troops for action against the Allied armies at the south, the evacuation of the triangle was considered imperative.

It has been estimated that at this time the forces of the Central Powers in the south probably outnumbered those of the Allies in the proportion of three to one, or even four to one. That the triangle should have been held so long in the face of greatly superior numbers bears eloquent testimony to the strength of the natural topographic barriers formed by the Tsrna and Vardar Rivers, as well as to the efficiency of the French who mainly were responsible for its defense. The British line now ran eastward from near

the Demir Kapu gorge, along the ridge north of Lake Doiran and south of the Strumitza valley and, like the French triangle, was supplied by one single-track railway. The Serbian front in the Monastir basin ran from west to east just north of the town and connected with the French along the Tsrna River side of the triangle. It also was dependent for supplies upon a single railway line. The French triangle was thus a prominent salient projecting far beyond the general Allied front; it possessed a vulnerable point, the Demir Kapu gorge, on the east side of the salient; and it was the center of a line the two wings of which were less effectively protected by natural barriers and all of which was inadequately supplied with lines of communication.

Early in December the withdrawal from this dangerous situation began. The French retired from the triangle and blocked the gorge against pursuit by blowing up the tunnel and bridge. The British were forced back toward the southwest by a series of furious Bulgarian assaults, and the Serbs were compelled to withdraw southward into Greek territory. The retirement was completed when the Allied armies took up their position behind the natural defenses of Saloniki. The character of these defenses and their influence on the further history of the war will claim our attention at a later time.